AMENDMENTS TO THE CLAIMS

The following listing of claims will replace all prior versions and listings of claims in the application.

LISTING OF CLAIMS

1. (Previously Amended) A plasma arc torch comprising:

a torch handle having a proximal end portion and a distal end portion;

a torch head disposed within the distal end portion of the torch handle, the torch head adapted for receiving an electrode of the plasma arc torch;

a torch lead operable with the torch head and extending from the proximal end portion of the torch handle;

a solenoid disposed within the torch head and operable with the torch lead and the torch head to control a supply of gas; and

an activation member operable with the solenoid,

wherein the activation member activates the solenoid such that gas flow is supplied from a power supply through the torch lead and to the torch head for supply to a plasma arc chamber of the plasma arc torch, proximate the electrode, and the activation member deactivates the solenoid such that the gas flow is terminated, such that operational pressure adjacent the torch head is maintained by the solenoid.

2. (Previously Amended) A plasma arc torch comprising:

a torch handle having a proximal end portion and a distal end portion;

a torch head disposed within the distal end portion of the torch handle, the torch head adapted for receiving an electrode of the plasma arc torch;

a torch lead operable with the torch head and extending from the proximal end portion of the torch handle;

a solenoid disposed within the torch head and operable with the torch lead and the torch head to control a supply of gas; and

a trigger system operable with the solenoid,

wherein the trigger system activates the solenoid such that gas flow is supplied from a power supply through the torch lead and to the torch head for supply to a plasma arc chamber of the plasma arc torch, proximate the electrode, and the trigger system deactivates the solenoid such that the gas flow is terminated, such that operational pressure adjacent the torch head is maintained by the solenoid.

3. (Previously Amended) A method of operating a plasma arc torch, the method comprising the steps of:

providing a source of gas;

providing an activation member operable with a solenoid disposed within a torch head distally from a handle of the plasma arc torch, the torch head adapted for receiving an electrode of the plasma arc torch; and

operating the activation member such that the solenoid is activated, thereby providing the gas for supply to a plasma arc chamber of the plasma arc torch, proximate the electrode, such that operational pressure adjacent the torch head is maintained by the solenoid.

4. Cancelled.

5. (Previously Amended) A plasma arc torch comprising:

a torch handle having a proximal end portion and a distal end portion;

a torch head disposed within the distal end portion of the torch handle and operatively connected to the torch handle, the torch head adapted for receiving an electrode of the plasma arc torch; and

a gas control device disposed within the torch head, the gas control device controlling the supply of gas to a plasma arc chamber of the plasma arc torch proximate the electrode,

wherein the gas control device allows gas pressure to build up local to the torch head for supply to the plasma arc chamber and the gas control device maintains operational pressure adjacent the torch head.

6. (Currently Amended) A method of operating a plasma arc torch comprising the step of building up gas pressure within a part of a torch head that is adapted to receive an electrode of the plasma arc torch with a gas control device that is disposed within and, distally from a torch handle, for supply to a plasma arc chamber of the plasma arc torch proximate the electrode, wherein the step of building up gas pressure is activated locally to the torch head, and not remotely, to reduce a delay in gas pressure build-up.

7. (Currently Amended) A method of operating a plasma arc torch comprising the step of maintaining an operational gas pressure within a part of a torch head that is adapted to receive an electrode of the plasma arc torch with a gas control device that is disposed within and, distally from a torch handle, for supply to a plasma arc chamber of the plasma arc torch proximate the electrode, wherein the

step of maintaining an operational gas pressure is activated locally to the torch head, and not remotely, to reduce a delay in gas pressure build-up.

8. (Previously Amended) The method according to Claim 6 wherein gas pressure is built up within the torch head and proximate the electrode to reduce restart times.